## Summary – Sequatchie River Watershed (06020004)

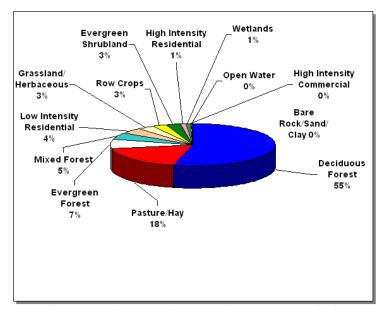
In 1996, the Tennessee Department of Environment and Conservation Division of Water Pollution Control adopted a watershed approach to water quality. This approach is based on the idea that many water quality problems, like the accumulation of point and nonpoint pollutants, are best addressed at the watershed level. Focusing on the whole watershed helps reach the best balance among efforts to control point sources of pollution and polluted runoff as well as protect drinking water sources and sensitive natural resources such as wetlands. Tennessee has chosen to use the USGS 8-digit Hydrologic Unit Code (HUC-8) as the organizing unit.

The Watershed Approach recognizes awareness that restoring and maintaining our waters requires crossing traditional barriers (point *vs.* nonpoint sources of pollution) when designing solutions. These solutions increasingly rely on participation by both public and private sectors, where citizens, elected officials, and technical personnel all have opportunities to participate. The Watershed Approach provides the framework for a watershed-based and community-based approach to address water quality problems.

Chapter 1 of the Sequatchie River Watershed Water Quality Management Plan discusses the Watershed Approach and emphasizes that the Watershed Approach is not a regulatory program or an EPA mandate; rather it is a decision-making process that reflects a common strategy for information collection and analysis as well as a common understanding of the roles, priorities, and responsibilities of all stakeholders within a watershed. Traditional activities like permitting, planning and monitoring are also coordinated in the Watershed Approach.

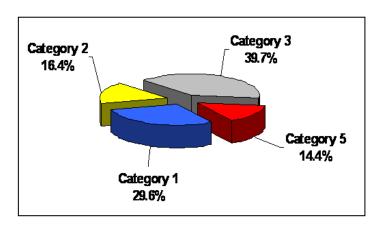
A detailed description of the watershed can be found in Chapter 2. The Sequatchie River Watershed is approximately 601 square miles and includes parts of six counties. A part of the Tennessee River drainage basin, the watershed has 909.3 stream miles.

One wildlife management area, one National Natural Landmark, one state forest, two Designated State Natural Areas, and six streams listed in the National Rivers Inventory are located in the watershed. Forty-six rare plant and animal species have been documented in the watershed, including five rare fish species, two rare crustacean species, and two rare mussel species.



Land Use Distribution in the Sequatchie River Watershed.

A review of water quality sampling and assessment is presented in Chapter 3. Using the Watershed Approach to Water Quality, 555 sampling events occurred in the Sequatchie River Watershed in 2000-2005. These were conducted at ambient, ecoregion, or watershed monitoring sites. Monitoring results support the conclusion that 76.2% of stream miles assessed fully support one or more designated uses.



Water Quality Assessment of Streams and Rivers in Sequatchie River Watershed. Assessment data are based on the 2006 Water Quality Assessment of 909.3 stream miles in the watershed.

Also in Chapter 3, a series of maps illustrates overall use support in the watershed, as well as use support for the individual uses of Fish and Aquatic Life Support, Recreation, Irrigation, and Livestock Watering and Wildlife. Additional maps illustrate streams that are listed for impairment by specific causes (siltation, E. coli).

Point and Nonpoint Sources are addressed in Chapter 4 which is organized by HUC-12 subwatersheds. Maps illustrating the locations of STORET monitoring sites and stream gauging stations are also presented in each subwatershed.

Chapter 5 is entitled *Water Quality Partnerships in the Sequatchie River Watershed* and highlights partnerships between agencies and between agencies and landowners that are essential to success. Programs of federal agencies (Natural Resources Conservation Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, and

HUC-8	HUC-10	HUC-12
06020004	0602000401	060200040101 Grassy Cove
		060200040102 Sequatchie River
		060200040103 Sequatchie River
		060200040104 Sequatchie River
		060200040105 Sequatchie River
		060200040106 Big Brush Creek
	0602000402	060200040201 Sequatchie River
		060200040202 Sequatchie River
		060200040203 Sequatchie River
		060200040204 Town Creek
	0602000403	060200040301 Little Sequatchie River, Upper
		060200040302 Pockett Creek
		060200040303 Little Sequatchie River, Lower

The Sequatchie River Watershed is Composed of thirteen USGS-Delineated Subwatersheds (12-Digit Subwatersheds).

Point source contributions to the Sequatchie River Watershed consist of 6 individual NPDES-permitted facilities. Other permits in the watershed (as of October 20, 2008) are Mining Permits (40), Aquatic Resource Alteration Permits (15), Tennessee Multi-Sector Permits (19), Construction General Permits (17), Water Treatment Plant Permits (3), CAFO Permits (7), and Ready Mix Concrete Plant Permits (3). Agricultural operations include cattle, chicken, hog, and sheep farming. Maps illustrating the locations of permit sites and tables summarizing livestock practices are presented in each subwatershed.

Tennessee Valley Authority) and state agencies (TDEC/State Revolving Fund, TDEC Division of Water Supply, Tennessee Department of Agriculture, Tennessee Wildlife Resources Agency). Local initiatives of organizations active in the watershed (Southeast Tennessee RC&D Council) are also described.

Point and Nonpoint source approaches to water quality problems in the Sequatchie River Watershed are addressed in Chapter 6. Chapter 6 also includes comments received during public meetings, links to EPA-approved TMDLs in the watershed, and an assessment of needs for the watershed.

The full Sequatchie River Watershed Water Quality Management Plan can be found at: <a href="http://www.state.tn.us/environment/wpc/watershed/wsm">http://www.state.tn.us/environment/wpc/watershed/wsm</a> plans/